AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Original) A zoom lens system comprising, in order from an object:

a first lens group having positive refractive power;

a second lens group having negative refractive power;

a third lens group having positive refractive power; and

a fourth lens group having positive refractive power;

each of the first lens group through the fourth lens group moving such that;

when the state of lens group positions varies from a wide-angle end state to a telephoto end state;

a distance between the first lens group and the second lens group increases;

a distance between the second lens group and the third lens group decreases; and

a distance between the third lens group and the fourth lens group decreases;

the third lens group including at least two sub-lens

groups having positive refractive power;

an image being shifted by moving either of the two sub-lens groups as a shift lens group perpendicularly to the optical axis; and

wherein the following conditional expression is satisfied:

$0.120 < DT/ft < 0.245$

where DT denotes an air space between the most image side lens surface of the first lens group and the most object side lens surface of the second lens group in the telephoto end state, and ft denotes the focal length of the zoom lens system in the telephoto end state.

2. (Original) The zoom lens system according to claim 1, wherein the following conditional expression is satisfied:

$0.8 < (1-\beta A)\times\beta B < 3.5$

where βA denotes the lateral magnification of the shift lens group and βB denotes the lateral magnification of the optical elements locating between the shift lens group and an image plane.

3. (Currently Amended) The zoom lens system according to claim 2~~;~~,

wherein the third lens group consists of, in order from the object~~;~~:

a third A lens group having positive refractive power;

a third B lens group having positive refractive power; and

a third C lens group having negative refractive power; and

wherein the shift lens group having positive refractive power is the third B lens group.

4. (Original) The zoom lens system according to claim 3, wherein the shift lens group includes at least one aspherical surface.

5. (Original) The zoom lens system according to claim 3, wherein the third A lens group consists of two positive lenses and one negative lens.

6. (Original) The zoom lens system according to claim 3, wherein the third B lens group consists of one positive lens and one negative lens.

7. (Original) The zoom lens system according to claim 2, wherein the shift lens group includes at least one aspherical surface.

8. (Currently Amended) The zoom lens system according to claim 1~~;~~,

wherein the third lens group consists of, in order from the object~~;~~:

a third A lens group having positive refractive power;

a third B lens group having positive refractive power; and

a third C lens group having negative refractive power; and

wherein the shift lens group having positive refractive power is the third B lens group.

9. (Original) The zoom lens system according to claim 8, wherein the shift lens group includes at least one aspherical surface.

10. (Original) The zoom lens system according to claim 8, wherein the third A lens group consists of two positive lenses and one negative lens.

11. (Original) The zoom lens system according to claim 8, wherein the third B lens group consists of one positive lens and one negative lens.

12. (Original) The zoom lens system according to claim 1, wherein the shift lens group includes at least one aspherical surface.

13. (Original) The zoom lens system according to claim 1, wherein the second lens group includes at least three negative lenses and one positive lens.

14. (Original) The zoom lens system according to claim 1, wherein the fourth lens group includes at least one aspherical surface having a shape that positive refractive power becomes weak from the center to the periphery of the lens surface.

15. (Cancelled)

16. (Previously Presented) A zoom lens system comprising, in order from an object:

a first lens group having positive refractive power;

a second lens group having negative refractive power;

a third lens group having positive refractive power; and

a fourth lens group having positive refractive power;

at least the first lens group and the fourth lens group moving to the object side such that when the state of lens group positions varies from a wide-angle end state to a telephoto end state a distance between the first lens group and the second lens group increases, a distance between the second lens group and the third lens group decreases, and a distance between the third lens group and the fourth lens group decreases;

the third lens group including a first sub-lens group, a second sub-lens group, and a third sub-lens group;

the second sub-lens group being arranged to the image side of the first sub-lens group with an air space;

the third sub-lens group being arranged to the image side of the second sub-lens group with an air space;

an image being shifted by moving the second sub-lens group shifting substantially perpendicularly to the optical axis; and

an aperture stop being arranged in the vicinity of the third lens group, inclusive of inside of the third lens group;

wherein the following conditional expressions are

satisfied:

$0.05 < Ds/fw < 0.7$

$0.1 < ft/fA < 1.5$

where Ds denotes a distance along the optical axis between the aperture stop and the nearest lens surface of the second sub-lens group, fw denotes the focal length of the zoom lens system in the wide-angle end state, fA denotes the focal length of the whole lenses locating to the object side of the second sub-lens group in the telephoto end state, and ft denotes the focal length of the zoom lens system in the telephoto end state.

17. (Original) The zoom lens system according to claim 16, wherein the first sub-lens group has positive refractive power and the following conditional expression is satisfied:

$0.06 < fa/ft < 0.2$

where fa denotes the focal length of the first sub-lens group.

18. (Original) The zoom lens system according to claim 17, wherein the second sub-lens group includes at least one positive lens and one negative lens, and has positive refractive power, and wherein the following conditional expression is satisfied:

$-0.6 < (na/ra)/(nb/rb) < 0$

where ra denotes a radius of curvature of the most object side lens surface of the second sub-lens group, na denotes refractive index at d-line of the most object side lens of the second sub-lens group, rb denotes a radius of curvature of the most image side lens surface of the second sub-lens group, and nb denotes refractive index at d-line of the most image side lens of the second sub-lens group.

19. (Original) The zoom lens system according to claim 18, wherein the third sub-lens group has negative refractive power and the following conditional expression is satisfied:

$0.5 < |fc|/f3 < 0.9$

where fc denotes the focal length of the third sub-lens group, and f3 denotes the focal length of the third lens group.

20. (Original) The zoom lens system according to claim 19, wherein the third sub-lens group includes a negative lens having a concave surface facing to the object locating to the most object side and the following conditional expression is satisfied:

$0.5 < |rc|/f3 < 0.75$

where rc denotes a radius of curvature of the negative

lens locating to the most object side of the third sub-lens group.

21. (Original) The zoom lens system according to claim 17, wherein the third sub-lens group has negative refractive power and the following conditional expression is satisfied:

$0.5 < |fc|/f3 < 0.9$

where fc denotes the focal length of the third sub-lens group, and f3 denotes the focal length of the third lens group.

22. (Original) The zoom lens system according to claim 21, wherein the third sub-lens group includes a negative lens having a concave surface facing to the object locating to the most object side and the following conditional expression is satisfied:

$0.5 < |rc|/f3 < 0.75$

where rc denotes a radius of curvature of the negative lens locating to the most object side of the third sub-lens group.

23. (Original) The zoom lens system according to claim 16, wherein the second sub-lens group includes at least one positive lens and one negative lens, and has positive

refractive power, and wherein the following conditional expression is satisfied:

$-0.6 < (na/ra)/(nb/rb) < 0$

where ra denotes a radius of curvature of the most object side lens surface of the second sub-lens group, na denotes refractive index at d-line of the most object side lens of the second sub-lens group, rb denotes a radius of curvature of the most image side lens surface of the second sub-lens group, and nb denotes refractive index at d-line of the most image side lens of the second sub-lens group.

24. (Original) The zoom lens system according to claim 23, wherein the third sub-lens group has negative refractive power and the following conditional expression is satisfied:

$0.5 < |fc|/f3 < 0.9$

where fc denotes the focal length of the third sub-lens group, and f3 denotes the focal length of the third lens group.

25. (Original) The zoom lens system according to claim 24, wherein the third sub-lens group includes a negative lens having a concave surface facing to the object locating to the most object side and the following conditional expression is satisfied:

$0.5 < |rc|/f3 < 0.75$

where rc denotes a radius of curvature of the negative lens locating to the most object side of the third sub-lens group.

26. (Original) The zoom lens system according to claim 16, wherein the third sub-lens group has negative refractive power and the following conditional expression is satisfied:

$0.5 < |fc|/f3 < 0.9$

where fc denotes the focal length of the third sub-lens group, and f3 denotes the focal length of the third lens group.

27. (Original) The zoom lens system according to claim 26, wherein the third sub-lens group includes a negative lens having a concave surface facing to the object locating to the most object side and the following conditional expression is satisfied:

$0.5 < |rc|/f3 < 0.75$

where rc denotes a radius of curvature of the negative lens locating to the most object side of the third sub-lens group.

28. (Previously Presented) A zoom lens system comprising, in order from an object:

a first lens group having positive refractive power;

a second lens group having negative refractive power;

a third lens group having positive refractive power; and

a fourth lens group having positive refractive power;

at least the first lens group and the fourth lens group moving to the object side such that when the state of lens group positions varies from a wide-angle end state to a telephoto end state a distance between the first lens group and the second lens group increases, a distance between the second lens group and the third lens group decreases, and a distance between the third lens group and the fourth lens group decreases;

the third lens group including a first sub-lens group, a second sub-lens group, and a third sub-lens group;

the second sub-lens group being arranged to the image side of the first sub-lens group with an air space;

the third sub-lens group being arranged to the image side of the second sub-lens group with an air space;

an image being shifted by moving the second sub-lens group shifting substantially perpendicularly to the optical axis; and

an aperture stop being arranged in the vicinity of the third lens group including inside of the third lens group;

wherein the following conditional expressions are satisfied:

$0.05 < Ds/fw < 0.7$

where Ds denotes a distance along the optical axis between the aperture stop and the nearest lens surface of the second sub-lens group, and fw denotes the focal length of the zoom lens system in the wide-angle end state.

29. (New) A method for forming an image of an object and varying a focal length, comprising:

providing a lens system that includes, in order from the object, a first lens group having positive refractive power, a second lens group having negative refractive power, a third lens group having positive refractive power and including at least two sub-lens groups having positive refractive power, and a fourth lens group having positive refractive power;

varying a state of lens group positions from a wide-angle end state to a telephoto end state by moving each of the first lens group through the fourth lens group such that a distance between the first lens group and the second lens group increases, a distance between the second lens group

and the third lens group decreases, and a distance between the third lens group and the fourth lens group decreases;

shifting the image by moving either of the two sub-lens groups as a shift lens group perpendicularly to an optical axis; and

wherein the following conditional expression is satisfied:

$0.120 < DT/ft < 0.245$

where DT denotes an air space between the most image side lens surface of the first lens group and the most object side lens surface of the second lens group in the telephoto end state, and ft denotes the focal length of the zoom lens system in the telephoto end state.

30. (New) The method according to claim 29,

wherein the following conditional expression is satisfied:

$0.8 < (1-\beta A)\times\beta B < 3.5$

where βA denotes the lateral magnification of the shift lens group and βB denotes the lateral magnification of the optical elements locating between the shift lens group and an image plane.

31. (New) The method according to claim 29,

wherein the third lens group includes, in order from the object, a third A lens group having positive refractive power, a third B lens group having positive refractive power, and a third C lens group having negative refractive power, and wherein the shift lens group having positive refractive power is the third B lens group.

32. (New) A method for forming an image of an object and varying a focal length comprising:

providing a lens system that includes, in order from the object, a first lens group having positive refractive power, a second lens group having negative refractive power, a third lens group having positive refractive power, and a fourth lens group having positive refractive power,

wherein the third lens group includes a first sub-lens group, a second sub-lens group, and a third sub-lens group, the second sub-lens group being arranged to the image side of the first sub-lens group with an air space and the third sub-lens group being arranged to the image side of the second sub-lens group with an air space, and wherein an aperture stop is arranged in a vicinity of the third lens group, inclusive of inside of the third lens group; and

varying a state of lens group positions from a wide-angle end state to a telephoto end state by moving at least the first lens group and the fourth lens group such that a distance between the first lens group and the second lens group increases, a distance between the second lens group and the third lens group decreases, and a distance between the third lens group and the fourth lens group decreases;

shifting the image by moving the second sub-lens group as a shift lens group substantially perpendicularly to an optical axis; and

wherein the following conditional expression is satisfied:

$0.05 < Ds/fw < 0.7$

where Ds denotes a distance along the optical axis between the aperture stop and the nearest lens surface of the second sub-lens group, and fw denotes the focal length of the zoom lens system in the wide-angle end state.

33. (New) The method according to claim 32,

wherein the following conditional expression is satisfied:

$0.1 < ft/fA < 1.5$,

where fA denotes the focal length of the whole lenses locating to the object side of the second sub-lens group in

the telephoto end state and ft denotes the focal length of the zoom lens system in the telephoto end state.

34. (New) The method according to claim 32,

wherein the following conditional expression is satisfied:

$0.06 < fa/ft < 0.2$

where fa denotes the focal length of the first sub-lens group and ft denotes the focal length of the zoom lens system in the telephoto end state.

35. (New) The method according to claim 32,

wherein the following conditional expression is satisfied:

$0.5 < |fc|/f3 < 0.9$

where fc denotes the focal length of the third sub-lens group and f3 denotes the focal length of the third lens group.